399-2-10 (C6187)
Log Data Report

Borehole Information:

Borehole:	399-2-10 (C6187)		Site:	300-FF-5	
Coordinates (WA St Plane)		GWL[1] (ft):	31.4	GWL Date:	07/18/08
North (m)	East (m)	Drill Date	TOC[2] Elevation	Total Depth (ft)	Type
116094.5	594234.4	07/17/08	Unknown	65	Sonic

Casing Information:

Casing Type	Stickup (ft)	Outer Diameter (in.)	Inside Diameter (in.)	Thickness (in.)	Top (ft)	Bottom (ft)
Welded Steel	0.8	7 5/8	6 7/8	3/8	0.8	60.0

Borehole Notes:

Casing data, and total depth were reported by the site Geologist. Logging engineer measured depth to water with an e-tape. Casing diameters were measured using a steel tape and rounded to the nearest 1/16-in. The zero reference is the ground surface.

Logging Equipment Information:

Logging System:	Gamma 4 L		Type: Serial No.:	60% HPGe SGLS 47TP32211A
Effective Calibration Date:	12/31/07	Calibration Reference:	HGLP-CC-027	
		Logging Procedure:	HGLP-MAN-002, Rev. 0	

Logging System:	Gamma 4 H		Type: Serial No.:	NMLS H310700352
Effective Calibration Date:	11/06/07	Calibration Reference:	HGLP-CC-021	
		Logging Procedure:	HGLP-MAN-002, Rev. 0	

Spectral Gamma Logging System (SGLS) Log Run Information:

Log Run	1	2 Repeat	5	6 Repeat	
Date	07/08/08	07/08/08	07/28/08	07/28/08	
Logging Engineer	McClellan	McClellan	McClellan	McClellan	
Start Depth (ft)	59.0	12.0	66.5	66.5	
Finish Depth (ft)	0.0	6.0	56.0	65.0	
Count Time (sec)	200	200	200	200	
Live/Real	R	R	R	R	
Shield (Y/N)	N	N	N	N	
MSA Interval (ft)	0.5	0.5	0.5	0.5	
Log Speed (ft/min)	N/A	N/A	N/A	N/A	
Pre-Verification	DL651CAB	DL651CAB	DL711CAB	DL711CAB	
Start File	DL651000	DL651119	DL711000	DL711022	
Finish File	DL651118	DL651131	DL711021	DL711025	
Post-Verification	DL651CAA	DL651CAA	DL711CAA	DL711CAA	
Depth Return Error (in.)	+0.25	0	N/A	0	
Comments	No fine gain adjustment	No fine gain adjustment	No fine gain adjustment	No fine gain adjustment	

Log Run	1	2 Repeat	5	6 Repeat	
	made.	made.	made.	made.	

Neutron Moisture Logging System (NMLS) Log Run Information:

Log Run	3	4 Repeat
Date	07/18/08	07/18/08
Logging Engineer	Pearson	Pearson
Start Depth (ft)	0.0	25.0
Finish Depth (ft)	31.25	28.0
Count Time (sec)	15	15
Live/Real	R	R
Shield (Y/N)	N	N
MSA Interval (ft)	0.25	0.25
Log Speed (ft/min)	N/A	N/A
Pre-Verification	DHH22CAB	DHH22CAB
Start File	DHH22000	DHH22000
Finish File	DHH22125	DHH22125
Post-Verification	DHH22CAA	DHH22CAA
Depth Return Error (in.)	N/A	0
Comments	None	None

Logging Operation Notes:

Data were collected using Gamma 4, HO 68B-3573. SGLS pre- and post-survey verification measurements were acquired in the Amersham KUTh-115 field verifier. Maximum logging depth achieved was 66.6 ft before the sonde un-weighted. A centralizer was installed on the sonde. NMLS pre- and post-survey verification measurements were acquired in the standard field verifier.

Analysis Notes:

Analyst:	Henwood	Date:	08/28/08	Reference:	GJO-HGLP 1.6.3, Rev. 0

SGLS pre- and post-survey verification spectra met the acceptance criteria for the established system. NMLS pre- and post-survey verification spectra met the acceptance criteria for the established system.

A casing correction for a 3/8-in. thick casing was applied from ground surface to 65 ft. A water correction was also applied during analysis from 31.4 ft to total logged depth of borehole.

SGLS spectra were processed in batch mode using APTEC SUPERVISOR to identify individual peaks and count rates. Concentrations were calculated using an EXCEL template identified as G4LDec07.xls using an efficiency function and corrections for casing, dead time and water as determined by annual calibrations. NMLS spectra were processed in batch mode in APTEC SUPERVISOR to identify counts. Count rates were calculated using an EXCEL template identified as G4HNov07.xls. There is no direct calibration data available for a 6 7/8-in. inner diameter borehole casing. Therefore, moisture data are reported in counts per second (cps).

Results and Interpretations:

No manmade radionuclides were detected. Spectra, where detections of Cs-137, U-238, and U-235 using the routine processing software were indicated, were individually inspected. It was determined the detections are statistical fluctuations and are not valid.

The KUT data indicate good repeatability.

The moisture data indicate good repeatability.

List of Log Plots:

Depth Reference is ground surface

Manmade Radionuclides
Natural Gamma Logs
Combination Plot
Total Gamma & Moisture
Repeat Section of Natural Gamma Logs
Repeat of Moisture

[1] GWL – groundwater level
[2] TOC – top of casing

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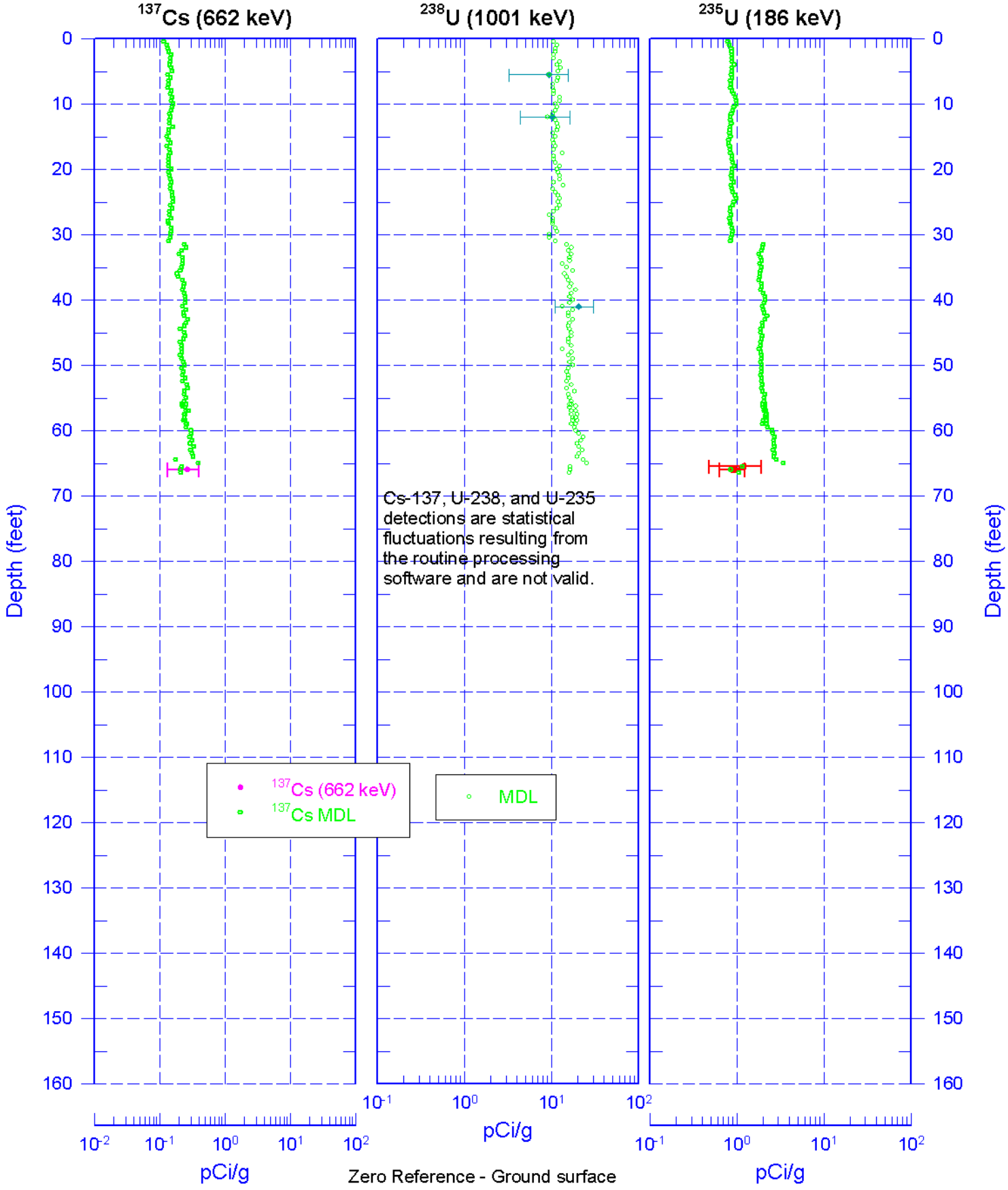
Man-Made Radionuclides



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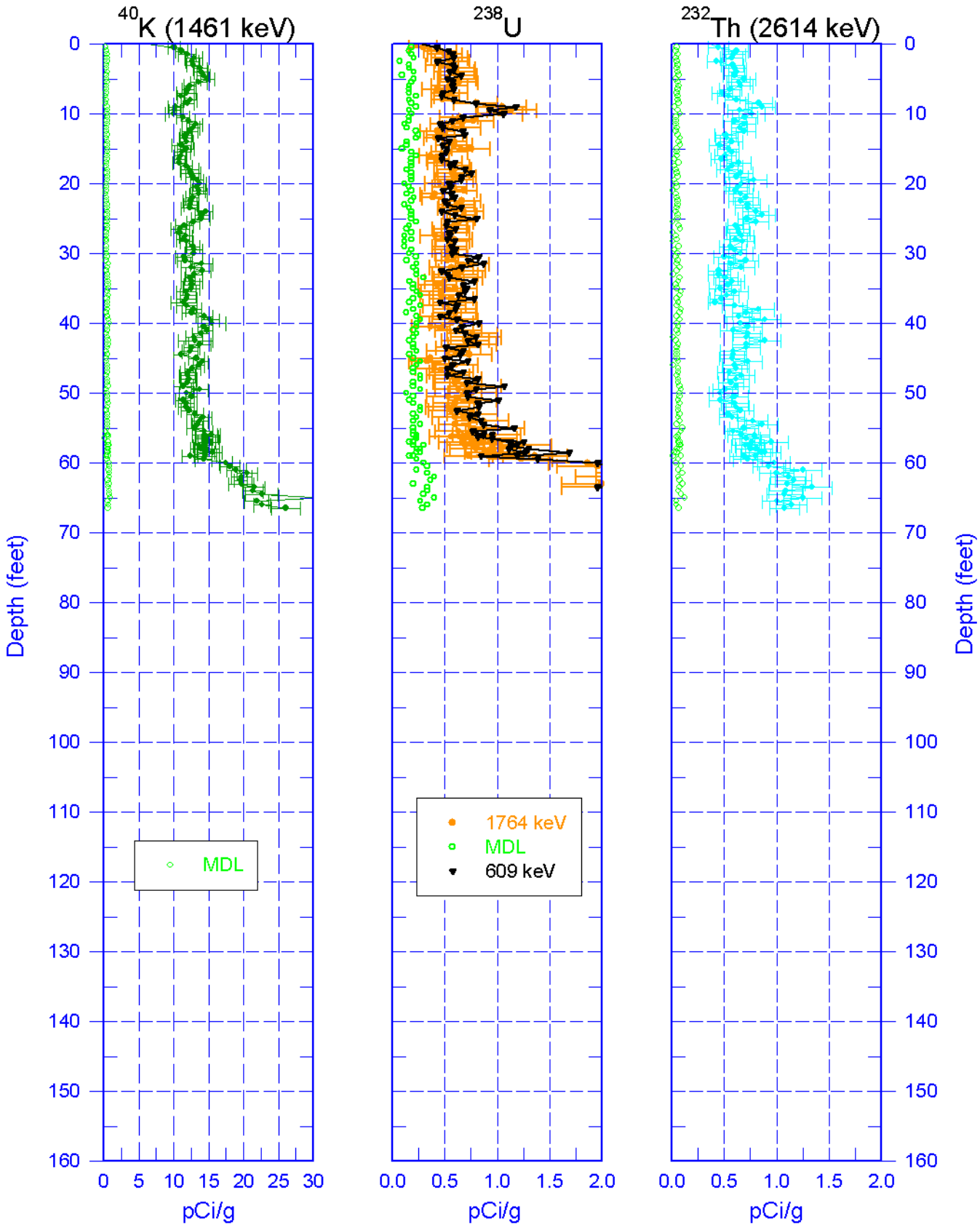
399-2-10 (C6187)
Natural Gamma Logs



Zero Reference - Ground surface

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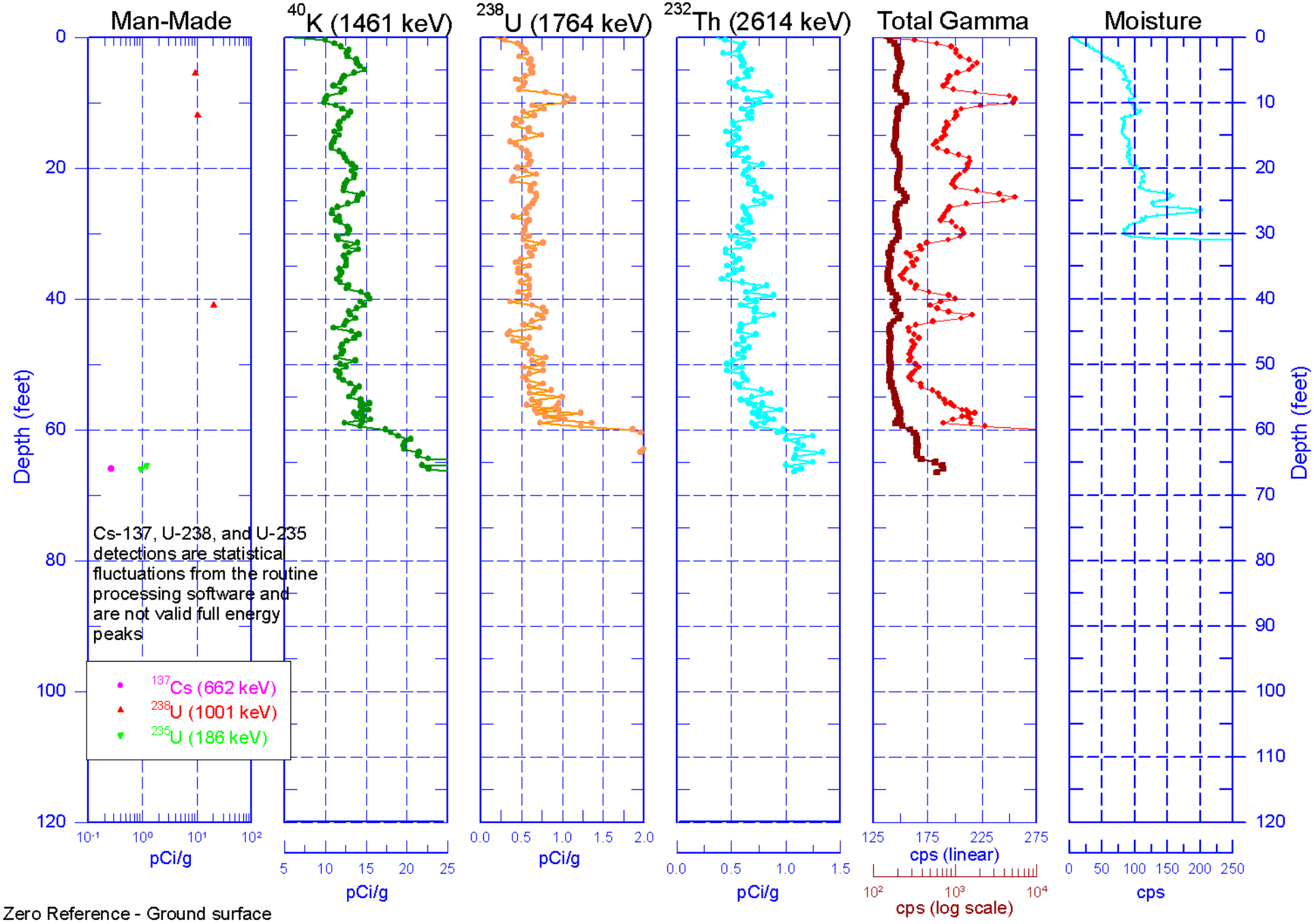
399-2-10 (C6187) Combination Plot



Zero Reference - Ground surface

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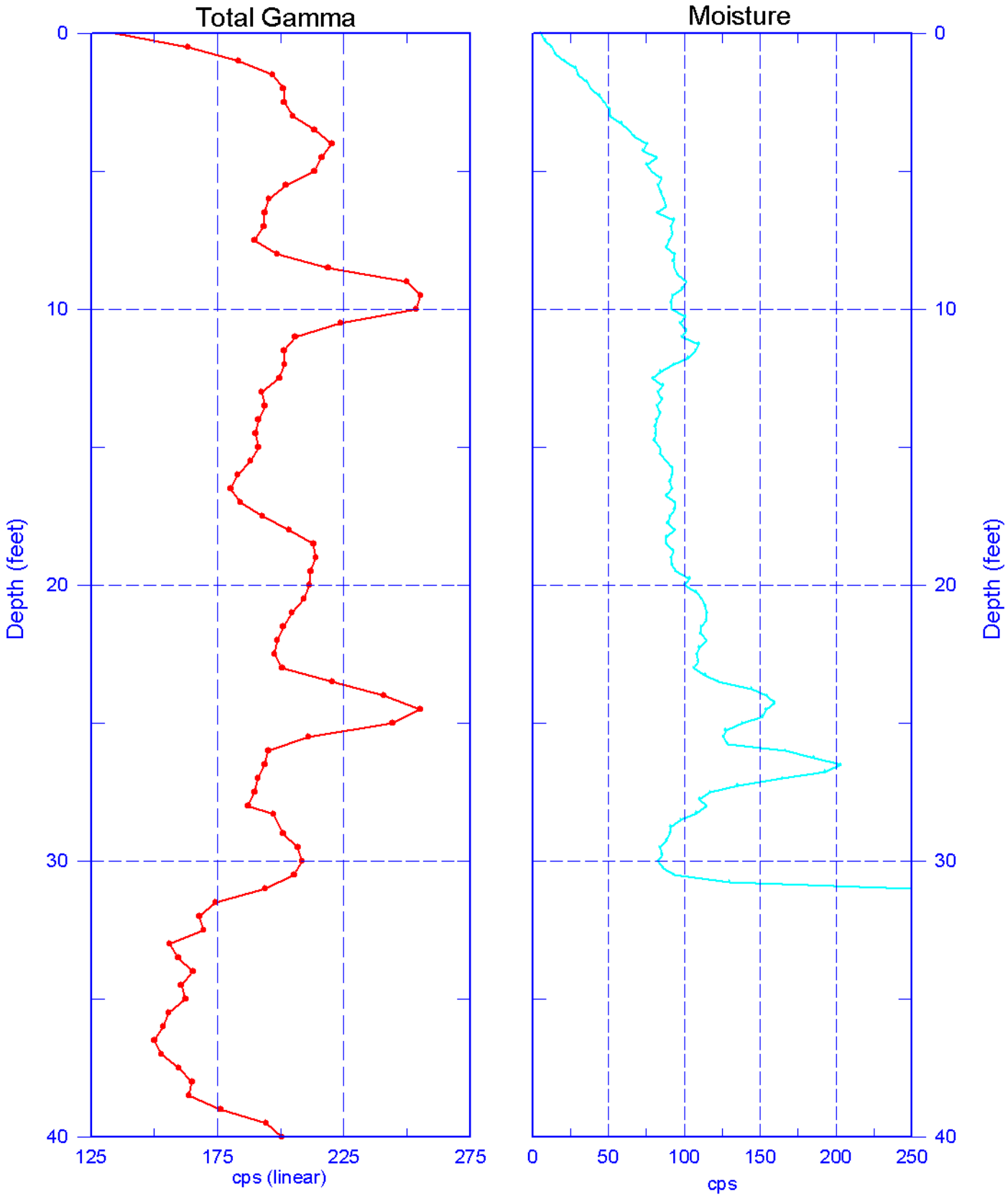
399-2-10 (C6187)
Total Gamma & Moisture



Reference - Ground Surface

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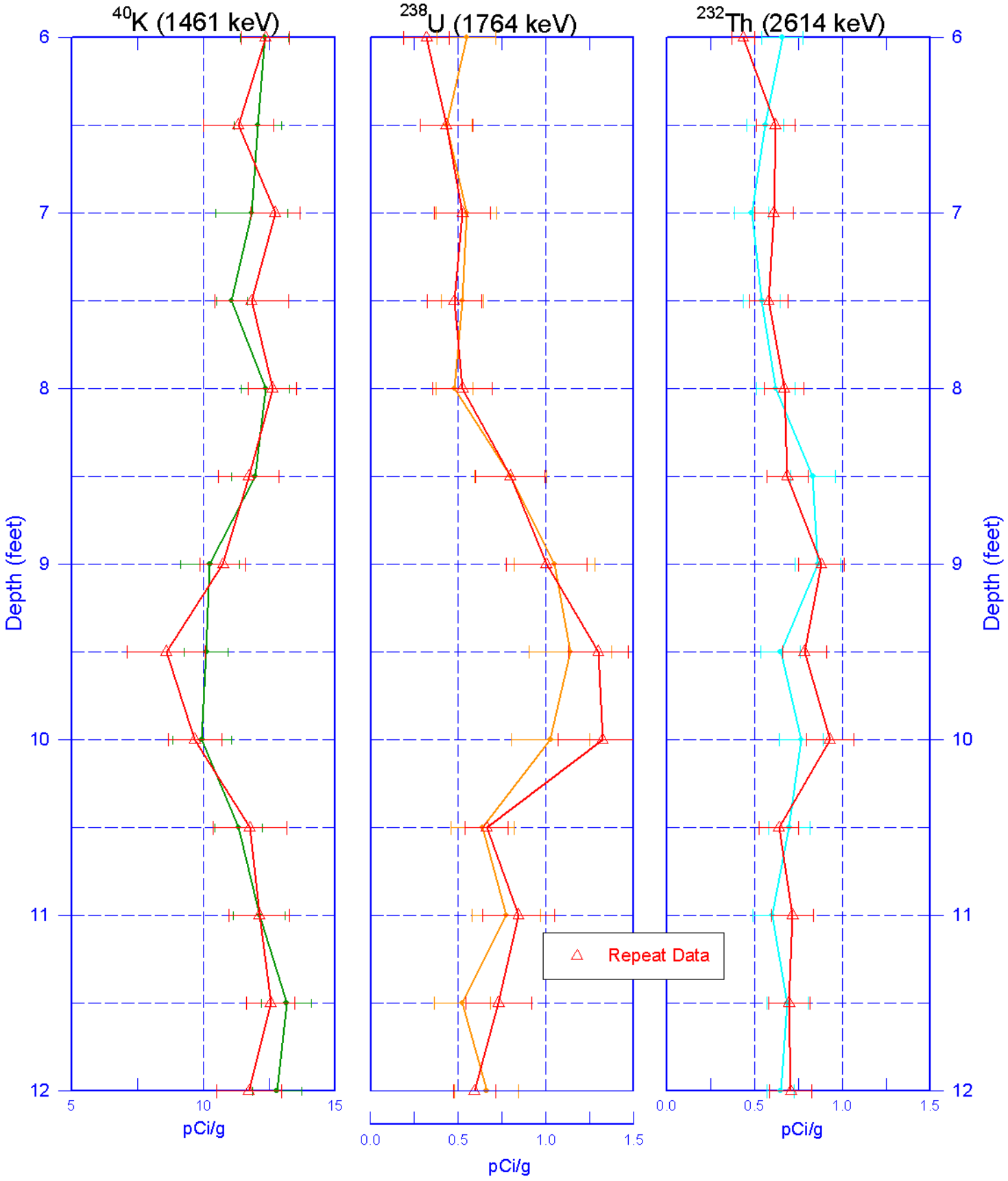
Repeat Section of Natural Gamma Logs



Zero Reference - Ground surface

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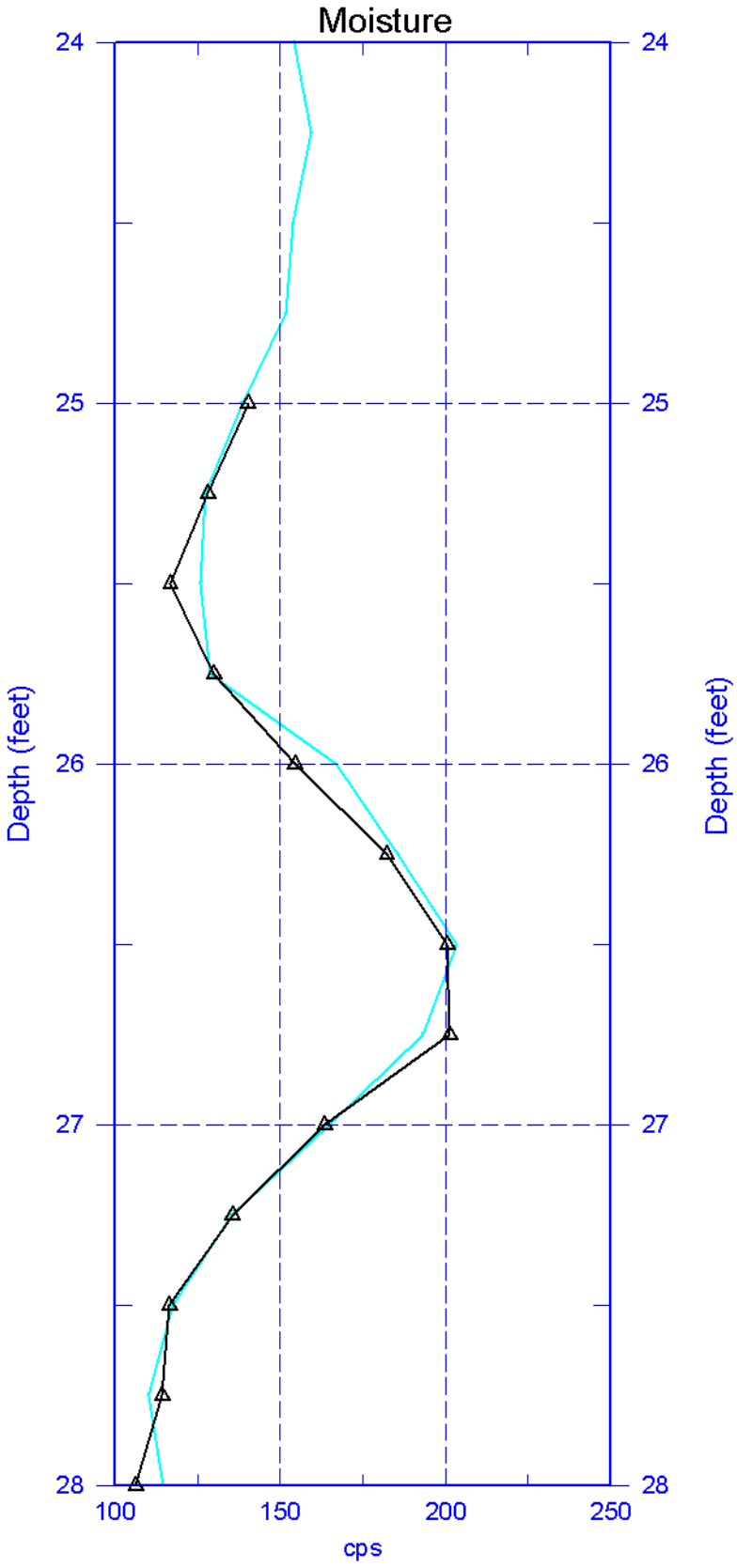
399-2-10 (C6187)
Repeat of Moisture



Reference - Ground Surface